

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An oral device comprising:  
a handle;  
a head, extending from said handle, having a pair of elongated arms that include opposed surfaces;  
a pair of opposed cleaning elements, mounted on said opposed surfaces, the cleaning elements being constructed and positioned to be inserted into a user's interproximal regions when the oral device is moved back and forth over the user's teeth, each of the cleaning elements being mounted at an acute angle relative to an interproximal line, wherein the angle relative to the interproximal line is in a plane that is substantially parallel to the chewing surface of a row of the user's teeth; and  
a plurality of pairs of centering elements, mounted on said opposed surfaces and positioned to guide the oral device and center it around a tooth, said centering elements ~~being~~ comprising cylindrical bristle tufts relatively shorter than said cleaning elements.
2. (Original) The oral device of claim 1 wherein at least some of said cleaning elements are positioned to be flexed towards said opposed arms during movement in a first direction, and then straighten out until they are substantially perpendicular to said opposed surfaces during movement in a second, opposite direction.
3. (Cancelled)

4. (Previously presented) The oral device of claim 1 wherein, on each of the opposed surfaces, each of the cleaning elements extends from the surface at substantially the same angle as the other cleaning elements.

5. (Previously presented) The oral device of claim 1 wherein said pairs of cleaning elements and said opposed surfaces define a pair of opposed brush heads.

6. (Original) The oral device of claim 5 wherein said handle comprises an elongated member.

7. (Original) The oral device of claim 5 wherein the opposed cleaning elements of each pair of cleaning elements define a V-shape.

8. (Original) The oral device of claim 1 wherein said angle is greater than 10 degrees.

9. (Original) The oral device of claim 8 wherein said angle is greater than 15 degrees.

10. (Original) The oral device of claim 9 wherein said angle is from about 15 to 40 degrees.

11. (Previously presented) The oral device of claim 1 wherein the opposed cleaning elements of each pair define a V shape.

12. (Previously presented) The oral device of claim 1 wherein said pairs of cleaning elements are positioned along said opposed surfaces at predetermined intervals.

13. (Previously presented) The oral device of claim 12 wherein said pairs of cleaning elements extend from the handle towards an opposite end of the head in a row.

14. (Original) The oral device of claim 13 wherein the cleaning elements are progressively shorter as the pairs are spaced further from the handle.

15. (Original) The oral device of claim 14 wherein the cleaning elements of each pair are from 2 to 20% shorter than the cleaning elements of an adjacent pair that is closer to the handle.

16. (Previously presented) The oral device of claim 1 wherein said opposed surfaces have a predetermined depth selected to accommodate front and back teeth of a user.

17. (Original) The oral device of claim 16 wherein said depth is from about 5 to 15 mm.

18. (Previously presented) The oral device of claim 1 wherein said handle includes a gripping portion that is constructed to be grasped between a thumb and first two fingers of a user's hand.

19. (Original) The oral device of claim 1 wherein said handle includes a substantially disc-shaped gripping portion.

20. (Original) The oral device of claim 18 wherein said handle includes an elongated shaft, said head is mounted at a first end of said elongated shaft, and said gripping portion is mounted at a second end of said elongated shaft.

21. (Original) The oral device of claim 1 wherein said head further comprises a web extending from said handle, and said opposed arms extend outwardly from opposite sides of said web.

22. (Original) The oral device of claim 21 wherein said web defines a substantially U-shaped opening that faces away from said handle.

23. (Previously presented) The oral device of claim 21 wherein said plurality of pairs of centering elements are positioned on said opposed surfaces between said cleaning elements and said web.

24. (Original) The oral device of claim 23 wherein the centering elements are positioned so that, in use, at least two centering elements on each side are touching the teeth simultaneously.

25. (Original) The oral device of claim 23 wherein said centering elements comprise elastomeric elements.

26. (Original) The oral device of claim 23 wherein said centering elements comprise bristle tufts.

27. (Original) The oral device of claim 23 wherein said centering elements are mounted substantially perpendicular to front and back surfaces of the user's teeth.

28. (Previously presented) The oral device of claim 12 wherein adjacent pairs of cleaning elements are spaced from 0.5 to 6.0 mm apart lengthwise along said arms.

29. (Original) The oral device of claim 1 wherein said cleaning elements comprise bristle tufts.

30. (Original) The oral device of claim 1 wherein said cleaning elements comprise elastomeric fins.

31. (Original) The oral device of claim 29 wherein at least some of the cleaning elements comprise inner, relatively longer thin bristles and outer, relatively shorter and thicker supporting bristles.

32. (Original) The oral device of claim 29 wherein said bristles have a diameter of from about 0.003 inch to 0.009 inch.

33. (Original) The oral device of claim 21 wherein said cleaning elements are angled away from said web.

34. (Original) The oral device of claim 33 wherein said cleaning elements are positioned at an angle of about 10 to 20 degrees with respect to said web.

35. (Currently amended) An oral device, constructed to be moved horizontally over teeth of a user with a ratcheting motion, comprising:

a handle;

a head, extending from said handle, having a pair of elongated arms that include opposed surfaces; ~~and~~

a plurality of pairs of opposed cleaning elements, mounted on said opposed surfaces, each of the cleaning elements being mounted at an angle of greater than 15 degrees relative to an interproximal line, wherein the angle relative to the interproximal line is in a plane that is substantially parallel to the chewing surface of a row of the user's teeth;

wherein at least some of said cleaning elements are positioned and dimensioned so that, during the ratcheting motion, the elements will be flexed towards a distal end of the handle during movement in a first direction, and then straighten out until they are substantially perpendicular to said opposed surfaces during movement in a second, opposite direction; and

a plurality of pairs of centering elements, mounted on said opposed surfaces and positioned to guide the oral device and center it around a tooth, said centering elements comprising cylindrical bristle tufts relatively shorter than said cleaning elements.

36-37. (Cancelled)

38. (Original) The oral device of claim 35 wherein said angle is from about 15 to 25 degrees.

39. (Previously presented) The oral device of claim 35 wherein the opposed cleaning elements of each pair define a V shape.

40. (Previously presented) The oral device of claim 35 wherein said pairs of cleaning elements and said opposed surfaces define a pair of opposed brush heads.

41. (Original) The oral device of claim 40 wherein said handle comprises an elongated member.

42. (Original) The oral device of claim 40 wherein the opposed elements of each of said pairs of cleaning elements defines a V-shape.

43. (Previously presented) The oral device of claim 35 wherein said opposed surfaces have a predetermined depth selected to accommodate front and back teeth of a user.

44. (Original) The oral device of claim 43 wherein said depth is from about 5 to 15 mm.

45-48. (Cancelled)

49. (Currently amended) A method of cleaning between the teeth of a human, comprising:

inserting into the mouth an oral device that includes (a) a handle having a first end constructed to be grasped by a user and a second, free end; (b) a head, positioned at said second end of the handle, having a pair of elongated arms, said arms being substantially parallel to each other and having opposed surfaces; ~~and~~ (c) pairs of opposed cleaning elements, mounted on said opposed surfaces, said pairs of cleaning elements being positioned along said opposed surfaces at predetermined intervals, each of the cleaning elements being positioned at an acute angle relative to an interproximal line, wherein the angle relative to the interproximal line is in a plane that is substantially parallel to the chewing surface of a row of the user's teeth, and wherein the distance between pairs corresponds substantially to the average spacing between human teeth; and (d) a plurality of pairs of centering elements, mounted on said opposed surfaces and positioned to guide the oral device and center it around a tooth, said centering elements comprising cylindrical bristle tufts relatively shorter than said cleaning elements;

positioning the oral device so that the opposed cleaning elements straddle a row of teeth;  
pushing the oral device slowly toward the back of the mouth until each pair of opposed cleaning elements is positioned between two adjacent teeth; and  
pulling the oral device slowly toward the front of the mouth, causing the cleaning elements to wedge into the interproximal region between the adjacent teeth.

50. (Cancelled)

51. (Previously presented) The oral device of claim 35 further comprising a plurality of pairs of centering elements, mounted on said opposed surfaces and positioned to guide the oral device and center it around a tooth.

52. (Previously presented) The oral device of claim 51 wherein the centering elements are positioned so that, in use, at least two centering elements on each side are touching the teeth simultaneously.

53. (Previously presented) The oral device of claim 51 wherein said centering elements comprise elastomeric elements.

54. (Previously presented) The oral device of claim 51 wherein said centering elements comprise bristle tufts.

55. (Previously presented) The oral device of claim 51 wherein said centering elements are mounted substantially perpendicular to front and back surfaces of the user's teeth.

56. (Previously presented) The oral device of claim 35 wherein adjacent pairs of cleaning elements are spaced from 0.5 to 6.0 mm apart lengthwise along said arms.

57. (Previously presented) The oral device of claim 35 wherein said cleaning elements comprise bristle tufts.

58. (Previously presented) The oral device of claim 35 wherein said cleaning elements comprise elastomeric fins.

59. (Previously presented) The oral device of claim 57 wherein at least some of the cleaning elements comprise inner, relatively longer thin bristles and outer, relatively shorter and thicker supporting bristles.

60. (Previously presented) The oral device of claim 57 wherein said bristles have a diameter of from about 0.003 inch to 0.009 inch.



61. (Currently amended) An oral device comprising:  
a handle;  
a head, extending from said handle, having a pair of elongated arms that include opposed surfaces; ~~and~~  
a plurality of pairs of opposed cleaning elements, mounted on said opposed surfaces, the cleaning elements being constructed and positioned to be inserted into a user's interproximal regions when the oral device is moved back and forth over the user's teeth, each of the cleaning elements being mounted at an acute angle relative to an interproximal line, wherein the angle relative to the interproximal line is in a plane that is substantially parallel to the chewing surface of a row of the user's teeth;  
at least some of the cleaning elements comprising inner, relatively long thin bristles and an outer, relatively shorter supporting structure surrounding the bristles; and  
a plurality of pairs of centering elements, mounted on said opposed surfaces and positioned to guide the oral device and center it around a tooth, said centering elements comprising cylindrical bristle tufts relatively shorter than said cleaning elements.

62. (Previously presented) The oral device of claim 61 wherein said supporting structure comprises bristles.

63. (Previously presented) The oral device of claim 61 wherein said supporting structure comprises a sleeve.

64. (Previously presented) The oral device of claim 61 wherein said inner bristles have a diameter of about 0.004 to 0.006 inch.

65. (Previously presented) The oral device of claim 62 wherein said inner bristles have a diameter of about 0.004 to 0.006 inch and said outer bristles have a diameter of about 0.007 to 0.010 inch.